

REMARKS

The Examiner provisionally rejected claims 1-15, 17-22, and 24-29 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 and 16-30 of copending Application No. 09/474,579. This copending application is commonly owned with the subject application. Therefore, a terminal disclaimer will be timely filed upon receipt of a Notice of Allowability.

The Examiner rejected claims 1-15, 17-22, and 24-29 under 35 U.S.C. § 103(a) as being unpatentable over Tsai et al. (5,698,322) in view of Takeda et al. (EP 0801172) and either Handbook of Technical Textiles (HTT) or Thermal Bonding of Nonwoven Fabrics (TBNF), as set forth in the previous two actions. In the Office Action dated April 9, 2003, the Examiner concluded that it would have been obvious to one having ordinary skill in the art to bond the nonwoven web of claim 1 at 20°C above the melting temperature of the first biodegradable fiber of claim 1 because "the skilled artisan would have been motivated to increase bonding temperature by the desire to increase the strength of the fabric." Tsai, however, teaches away from increasing temperature to increase strength. Tsai states that "too high of a heat-setting temperature as, for example, a temperature close to the melting temperature of the first component of a multicomponent fiber, may reduce the fiber strength and could result in the fiber being hard to handle due to tackiness." See col. 9, Ins. 1-5. Therefore, it would not have been obvious to a person having ordinary skill in the art to thermally bond the nonwoven web at a temperature within about 20°C above the melting temperature of the first biodegradable binder fiber, because there is no motivation to do so. Similarly, it

would not have been obvious to thermally bond the nonwoven web at a temperature less than about 23°C above the melting temperature of the first biodegradable binder fiber, as required by amended claim 1.

The Examiner also contends that the claimed permeability and void volume are inherent in the claimed combination of materials. Applicants respectfully traverse.

Merely combining the first fiber and the second fiber into a nonwoven web will not result in the claimed permeability and void volume. Instead, the claimed permeability and void volume result only when the claimed combination of materials is processed according to the non-obvious conditions set forth in the claims – i.e., thermally bonding the nonwoven web at a temperature less than about 23°C above or 5°C below the melting temperature of the first biodegradable binder fiber, using only convective heating.

For example, the non-inherency of the claimed properties is demonstrated by two nonwoven webs that contain identical materials but ultimately have two entirely different physical structures. Table 2 shows that samples #2 and #3 contain precisely the same fibers in the same ratios. The only difference between the samples is the 25°C difference in bonding temperatures. This difference results in Sample #2 being a hard, lumpy web (due to overbonding) and Sample #3 being a soft, strong web. Therefore, the desirable properties of Sample #3 (which fall within the claimed property ranges) result from processing the claimed combination of materials according to the claimed processing conditions, rather than from the inherent nature of the materials themselves. Moreover, as explained above, use of the claimed processing conditions would not be

obvious because of the potential for overbonding and decreased strength when webs are bonded at temperatures above the melting temperature of the fiber.

Further, the amended claims require that the web not be overbonded. If one having ordinary skill in the art were to attempt to increase the strength of the web by randomly increasing the bonding temperature, the probable result would be overbonding, rather than a strong web having the claimed properties. Nor could one having ordinary skill in the art obtain a product having the claimed properties by simply increasing the void volume of the materials until the claimed permeability is reached, because the claimed invention exhibits the unexpected result of a permeability that is less than the expected permeability for a void volume in the claimed range. Indeed, Table 3 shows that the web of the invention exhibits a permeability that is lower than the permeability of a current surge material even though the void volume of the web of the current invention is *greater* than the void volume of the current surge material. That is, the web of the invention exhibits a decrease in permeability upon an increase in void volume, contrary to the expected result of an increase in permeability upon an increase in void volume.

Therefore, the cited references do not teach or suggest the presently claimed web. Applicants respectfully request withdrawal of the rejection and allowance of the claims.

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Response to March 1, 2004 Office Action

If, for any reason, the Examiner feels that the above amendments and remarks do not put the claims in condition for allowance, the undersigned attorney can be reached at (312) 222-8105 to resolve any remaining issues.

Respectfully submitted,



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